DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17


RIN 1018–BA74

Endangered and Threatened Wildlife and Plants; Endangered Species Status for

Guadalupe Fescue; Designation of Critical Habitat for Guadalupe Fescue

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), determine endangered species status and designate critical habitat under the Endangered Species Act of 1973, as amended (Act), for Festuca ligulata (Guadalupe fescue), a plant species from the Chihuahuan Desert of west Texas and Mexico. The effect of this regulation will be to add this species to the List of Endangered and Threatened Plants and designate approximately 7,815 acres (3,163 hectares) of critical habitat in Brewster County, Texas located entirely within Big Bend National Park.

DATES: This rule becomes effective [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

FOR FURTHER INFORMATION CONTACT:  Adam Zerrenner, Field Supervisor, U.S.
Fish and Wildlife Service, Austin Ecological Services Field Office, 10711 Burnet Rd., Suite 200,
Austin, TX 78758; telephone 512–490–0057; or facsimile 512–490–0974. Persons who use a
telecommunications device for the deaf (TDD) may call the Federal Relay Service at 800–877–
8339.

SUPPLEMENTARY INFORMATION:

Previous Federal Action

On September 9, 2016, we, the U.S. Fish and Wildlife Service (Service), published in the
Federal Register a proposed rule to list Festuca ligulata (Guadalupe fescue), a plant species
from the Chihuahuan Desert of west Texas and Mexico, as an endangered species under the
listing rule contains a detailed description of previous Federal actions concerning this species (81
FR 62450).

On September 9, 2016, we also published a proposed rule to designate critical habitat for
Guadalupe fescue on approximately 7,815 acres (3,163 hectares) in Brewster County, Texas,
located entirely in Big Bend National Park (81 FR 62455) and requested public comments. The
comment period closed on November 8, 2016. We also contacted appropriate Federal, State, and
local agencies; scientific organizations; and other interested parties and invited them to comment
on the proposed rule and draft economic analysis during the comment period. We opened
another 30-day comment period on June 13, 2017.

The effect of this rulemaking action is to add Guadalupe fescue to the List of Endangered
and Threatened Plants in title 50 of the Code of Federal Regulations at 50 CFR 17.12(h) and
thereby extend the Act’s protections to the species and finalize the designation of approximately 7,815 acres (3,163 hectares) of critical habitat in Big Bend National Park.

**Summary of Comments and Recommendations**

We received a total of six public comments that did not include any new information not already considered in our analysis. During either comment period, we received no comment letters directly addressing the proposed critical habitat designation or any requests for a public hearing.

**Peer Review**

In accordance with our peer review policy published on July 1, 1994 (59 FR 34270), we solicited expert opinions from four knowledgeable individuals with scientific expertise that included familiarity with the species, the geographic region in which the species occurs, and conservation biology principles. We received responses from two of the peer reviewers who provided comments on the proposed listing rule and the Species Status Assessment. However, they did not provide comments on the proposed designation of critical habitat for Guadalupe fescue.

**Summary of Changes from Proposed Rules**

We made no substantive changes from the proposed rules of September 9, 2016 to list or designate critical habitat for Guadalupe fescue in this final rule.

**Background**

Staff of the Austin Ecological Services Field Office developed the Species Status Assessment (SSA) Report for Guadalupe fescue, which is an evaluation of the best available scientific and commercial data on the status of the species, including the past, present, and future threats to this species and the effect of conservation measures. The SSA Report and other

The SSA Report (Service 2016) is based on a thorough review of the natural history, habitats, ecology, populations, and range of Guadalupe fescue. The SSA Report analyzes individual, population, and species requirements; factors affecting the species’ survival; and current conditions to assess the species’ current and future viability in terms of resiliency, redundancy, and representation. We define viability as the ability of a species to maintain populations over a defined period of time.

Resiliency refers to the population size necessary to endure stochastic environmental variation (Shaffer and Stein 2000, pp. 308–310). Resilient populations are better able to recover from losses caused by random variation, such as fluctuations in recruitment (demographic stochasticity), variations in rainfall (environmental stochasticity), or changes in the frequency of wildfires.

Redundancy refers to the number and geographic distribution of populations or sites necessary to endure catastrophic events (Shaffer and Stein 2000, pp. 308–310). As defined here, catastrophic events are rare occurrences, usually of finite duration, that cause severe impacts to one or more populations. Examples of catastrophic events include tropical storms, floods, prolonged drought, and unusually intense wildfire. Species that have multiple resilient populations distributed over a larger landscape are more likely to survive catastrophic events, since not all populations would be affected.

Representation refers to the genetic diversity, both within and among populations, necessary to conserve long-term adaptive capability (Shaffer and Stein 2000, pp. 307–308).
Species with greater genetic diversity are more able to adapt to environmental changes and to colonize new sites.

**Summary of Biological Status and Threats**

Guadalupe fescue is a short-lived perennial grass species found only in a few high mountains of the Chihuahuan Desert, west of the Pecos River in Texas and in the State of Coahuila, Mexico. These “sky island” habitats are conifer-oak woodlands above 1,800 meters (m) (5,905 feet (ft)) elevation. Historically, the species has been reported in only six sites. It was first collected in 1931, in the Guadalupe Mountains, Culberson County, Texas, and in the Chisos Mountains, Brewster County, Texas; these sites are now within Guadalupe Mountains National Park and Big Bend National Park, respectively. Guadalupe fescue was documented near Fraile, southern Coahuila, in 1941; in the Sierra la Madera, central Coahuila, in 1977; and at two sites in the Maderas del Carmen Mountains of northern Coahuila in 1973 and 2003. The last three sites are now within protected natural areas (“areas naturales protegidas” (ANP)) designated by the Mexican Federal Government.

In the United States, populations of Guadalupe fescue have experienced significant declines. Guadalupe fescue was last observed in the Guadalupe Mountains in 1952; this population is presumed extirpated. Researchers from the Texas Parks and Wildlife Department and Big Bend National Park have quantitatively monitored plots within the Chisos Mountains population over a 24-year period. Our analysis of these data indicates that the population within the plots (about 25 to 50 percent of the total population) has decreased significantly over time, from a high of 125 and 127 individuals in 1993 and 1994, to a low of 47 individuals in 2013 and 2014; by 2016 the monitored population had increased slightly to 56 individuals. Little information is available for the known populations in Mexico. Valdes-Reyna (2009, pp. 13, 15)
confirmed that one population in the Maderas del Carmen Mountains is extant. This population had several hundred individuals in 2003 (Big Bend National Park and Service 2008), and is protected within ANP Maderas del Carmen. The status of the other three Coahuilan populations remains unknown.

To estimate the amount and distribution of potential Guadalupe fescue habitat, we mapped conifer-oak forests in the Chihuahuan Desert at elevations greater than 1,800 m. Because larger habitat areas may be more suitable for viability, we restricted this model to areas greater than 200 hectares (ha) (494 acres (ac)). This model reveals that northern Mexico has 283 areas of potential habitat totaling 537,998 ha (over 1.3 million ac), compared to 20 such areas totaling 27,881 ha (68,894 ac) in Texas. Thus, about 95 percent of the potential habitat for the species is in Mexico. However, we do not have information confirming that any of these areas actually contain Guadalupe fescue.

Monitoring suggests that the Chisos Mountains population has decreased in size; however, the data indicate that survival rates within this monitored population have increased. These inverse trends may be explained by a recruitment rate (establishment of new individuals) that is too low to sustain the population. We do not know why the recruitment rate at the Chisos population is low. We have no information about the species’ genetic viability, within-population and within-species genetic differentiation, chromosome number, or breeding system. However, because grasses are wind-pollinated, small and widely scattered populations produce few if any seeds from out-crossing (pollination by unrelated individuals). Many perennial grasses, including some Festuca species, are obligate out-crossers. If Guadalupe fescue is an obligate out-crossover, the sparse Chisos population would produce few seeds; if it is not an obligate out-crossover, it is probably highly inbred and may suffer from inbreeding depression.
Although the minimum viable population (MVP) size has not yet been calculated for Guadalupe fescue, we can estimate its MVP by comparison to species with similar life histories (i.e., surrogates) for which MVPs have been calculated, using the guideline adapted from Pavlik (1996, p. 137). Through this comparison, we estimate that populations of Guadalupe fescue should have at least 500 to 1,000 individuals for long-term population viability (Service 2016, pp. 17–18).

One factor potentially negatively affecting the existing population in the Chisos Mountains is the loss of regular wildfires. Periodic wildfire and leaf litter reduction may be necessary for long-term survival of Guadalupe fescue populations, although this theory has not been investigated. Historically, wildfires occurred in the vicinity of the Chisos population at least 10 times between 1770 and 1940 (Moir and Meents 1981, p. 7; Moir 1982, pp. 90–98; Poole 1989, p. 8; Camp et al. 2006, pp. 3–6, 14–23, 59–61). These relatively frequent, low-intensity fires would have reduced accumulated fuels in the understory, thereby preventing high-intensity crown fires. However, the last major fire there was more than 70 years ago, due to fire suppression within the National Park. The long absence of fire and the resulting accumulation of fuels also increase the risk of more intense wildfire, which could result in the loss of the remaining Guadalupe fescue population in the United States.

Other factors that may affect the continued survival of Guadalupe fescue include the genetic and demographic consequences of small population sizes and isolation of its known populations; livestock grazing; erosion or debris flow caused by trail runoff; competition from invasive species such as Marrubium vulgare (Horehound) and Bothriochloa ischaemum (King Ranch bluestem); effects of climate change, such as higher temperatures and changes in the amount and seasonal pattern of rainfall; and fungal infection of seeds. Big Bend National Park,
the site of the only known population in the United States, has minimized the potential threat of
trampling from humans and pack animals by restricting visitors and trail maintenance crews to
established trails and through visitor outreach.

The Service, Big Bend National Park, and Guadalupe Mountains National Park
established candidate conservation agreements for the Guadalupe fescue in 1998 and 2008. The
objectives of these 10-year agreements include monitoring and surveys, seed and live plant
banking, fire and invasive species management, trail management, staff and visitor education,
establishment of an advisory team of species experts, and cooperation with Mexican agencies
and researchers to conserve the known populations of Guadalupe fescue and search for new
ones. Research objectives include investigations of fire ecology, habitat management, genetic
structure, reproductive biology, and reintroduction. Upon listing the species, Big Bend National
Park has committed to meeting the same conservation objectives and actions (Sirotnak 2016,
pers. comm.).

Based on the best available information, we know of only two extant populations of
Guadalupe fescue. The Chisos Mountains population is far smaller than our estimated MVP
level, and despite protection, appropriate management, and periodic monitoring by the National
Park Service, it declined between 1993 and 2016. The other extant population, at ANP Maderas
del Carmen in northern Coahuila, Mexico, may have exceeded our estimated MVP level as
recently as 2003, and the site is managed for natural resources conservation. Unfortunately, we
possess very little information about the current status of the species at Maderas del Carmen and
throughout Mexico. Our analysis revealed that a large amount of potential habitat exists in
northern Mexico. Thus, it is possible that other undiscovered populations of Guadalupe fescue
exist in northern Mexico, and that the overall status of the species is more secure than we now
know. Nonetheless, the Service has to make a determination based on the best available scientific data, which currently confirms only one extant population in Mexico.

**Summary of Changes from the Proposed Listing Rule**

We made no substantive changes from the proposed rule of September 9, 2016 (81 FR 62450), to this final rule.

**Summary of Comments and Recommendations**

In the proposed rule, we requested that all interested parties submit written comments on the proposal by November 8, 2016. We also contacted the National Park Service (Big Bend National Park), Texas Parks and Wildlife Department, the Texas Comptroller’s Office, the Secretaría de Medio Ambiente y Recursos Naturales (SEMARNAT, a Mexican federal agency), PRONATURA Sur (a Mexican non-governmental non-profit conservation organization), scientific experts and organizations, and other interested parties and invited them to comment on the proposal. We opened another 30-day public comment period June 13, 2017. Newspaper notices inviting general public comment were published in the Alpine Avalanche. We received no comments from State or Federal agencies, no substantive public comments, and no requests for a public hearing.

**Peer Reviewer Comments**

In accordance with our peer review policy published on July 1, 1994 (59 FR 34270), we solicited expert opinion from four knowledgeable individuals with scientific expertise that included familiarity with Guadalupe fescue and its habitat, biological needs, and threats. We received responses from two of the peer reviewers.
We reviewed the comments received from the peer reviewers for substantive issues and new information regarding the listing of Guadalupe fescue. The peer reviewers generally concurred with our conclusions and provided additional information, clarifications, and suggestions to improve the final rule. Peer reviewer comments are addressed and incorporated into the final rule as appropriate.

**Determination**

*Standard for Review*

Section 4 of the Act (16 U.S.C. 1533), and its implementing regulations at 50 CFR part 424, set forth the procedures for adding species to the Federal Lists of Endangered and Threatened Wildlife and Plants. Under section 4(a)(1) of the Act, we may list a species based on (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) Overutilization for commercial, recreational, scientific, or educational purposes; (C) Disease or predation; (D) The inadequacy of existing regulatory mechanisms; or (E) Other natural or manmade factors affecting its continued existence. Listing actions may be warranted based on any of the above threat factors, singly or in combination.

The fundamental question before the Service is whether the species meets the definition of “endangered species” or “threatened species” under the Act. To make this determination, we evaluated the projections of extinction risk, described in terms of the condition of current and future populations and their distribution (taking into account the risk factors and their effects on those populations). For any species, as population condition declines and distribution shrinks, the species’ extinction risk increases and overall viability declines.

The Act defines an endangered species as any species that is “in danger of extinction throughout all or a significant portion of its range” and a threatened species as any species
“which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.” The phrase “significant portion of its range” (SPR) is not defined by the Act, and the court in Center for Biological Diversity v. Jewel held that aspects of the Service’s “Policy on Interpretation of the Phrase ‘Significant Portion of Its Range’ in the ESA’s Definitions of ‘Endangered Species’ and ‘Threatened Species’” (SPR Policy) were not valid No. 14-cv-02506-RM (D. Ariz. Mar. 29, 2017) (Pygmy-Owl Decision). Although the court’s order in that case has not yet gone into effect, if the court denies the pending motion for reconsideration, the SPR Policy would become vacated. Therefore, we have examined the plain language of the Act and court decisions addressing the Service’s application of the SPR phrase in various listing decisions, and for purposes of this rulemaking we are applying the following interpretation for the phrase “significant portion of its range” and its context in determining whether or not a species is an endangered species or a threatened species. This interpretation is consistent with the SPR Policy and the Pygmy-Owl Decision, and the SPR Policy provides a detailed explanation of the bases and support for this interpretation. We also set out below additional explanation for the interpretation we are applying for this rulemaking, including explaining any aspects of this interpretation that could be perceived as inconsistent with the SPR Policy or the Pygmy-Owl Decision.

As described in the SPR Policy, two courts have found that, once the Service determines that a “species”—which can include a species, subspecies, or DPS under ESA Section 3(16)—meets the definition of “endangered species” or “threatened species,” the species must be listed in its entirety and the Act’s protections applied consistently to all members of that species (subject to modification of protections through special rules under sections 4(d) and 10(j) of the Act). See Defenders of Wildlife v. Salazar, 729 F. Supp. 2d 1207, 1222 (D. Mont. 2010)

For the purposes of this rule, we interpret the phrase “significant portion of its range” in the Act’s definitions of “endangered species” and “threatened species” to provide an independent basis for listing a species in its entirety; thus there are two situations (or factual bases) under which a species would qualify for listing: A species may be in danger of extinction or likely to become so in the foreseeable future throughout all of its range; or a species may be in danger of extinction or likely to become so throughout a significant portion of its range. If a species is in danger of extinction throughout an SPR, it, the species, is an “endangered species.” The same analysis applies to “threatened species.” Therefore, consistent with the district court case law, the consequence of finding that a species is in danger of extinction or likely to become so throughout a significant portion of its range is that the entire species will be listed as an endangered species or threatened species, respectively, and the Act’s protections will be applied to all individuals of the species wherever found.

In implementing these independent bases for listing a species, we list any species in its entirety either because it is in danger of extinction now or likely to become so in the foreseeable future throughout all of its range or because it is in danger of extinction or likely to become so in the foreseeable future throughout a significant portion of its range. With regard to the text of the Act, we note that Congress placed the “all” language before the SPR phrase in the definitions of “endangered species” and “threatened species.” This suggests that Congress intended that an
analysis based on consideration of the entire range should receive primary focus. Thus, the first step in our assessment of the status of a species is to determine its status throughout all of its range. Depending on the status throughout all of its range, we will subsequently examine whether it is necessary to determine its status throughout a significant portion of its range.

**Guadalupe Fescue Determination of Status Throughout All of Its Range**

We documented in our SSA Report (Service 2016, entire) that only two extant populations of Guadalupe fescue are currently known. The only extant population in the United States, in the Chisos Mountains at Big Bend National Park, has declined in abundance since 1993, despite the conservation efforts outlined in the candidate conservation agreement. Only 56 individuals were observed there in 2016, which is far less than an estimated MVP size of 500 to 1,000 individuals based on species with similar life histories. The other extant population, in the ANP Maderas del Carmen in Coahuila, had several hundred individuals in 2003, and was confirmed extant in 2009 with no population estimate. Three other historically known populations in remote areas of Coahuila, Mexico, have not been observed in at least 39 years, and their statuses remain unknown.

We find that several factors reduce the viability of Guadalupe fescue, including: Changes in the wildfire cycle and vegetation structure of its habitats, trampling from humans and pack animals, erosion or debris flow caused by trail runoff, and competition from invasive species such as *Marrubium vulgare* (Horehound) and *Bothriochloa ischaemum* (King Ranch bluestem) (Factor A); grazing by livestock and feral animals of Guadalupe fescue plants (Factor C); and the genetic and demographic consequences of small population sizes, isolation of its known populations, and potential impacts of climate changes, such as higher temperatures and changes in the amount and seasonal pattern of rainfall (Factor E). Although trampling, trail runoff,
invasive species, and grazing are likely to be ameliorated by ongoing and future conservation efforts on Federal lands in the United States, the effects of small population size, geographic isolation, and climate change are all rangewide threats and expected to continue into the foreseeable future. Limited information is available regarding the known populations of Guadalupe fescue in Mexico; however, most of the above factors are likely to be widespread and ongoing threats throughout the potential habitats in Mexico (Service 2016).

There are only two known extant populations of Guadalupe fescue, one each in Texas and in Coahuila, Mexico. We have no recent observations of three additional populations reported from Mexico, and their statuses are unknown. A second population reported from the United States has not been seen in more than 60 years, despite extensive surveys, and is presumed extirpated. Based on annual monitoring conducted through 2016, the Chisos Mountains population in the United States is estimated to have in the range of 100 and 200 individuals, well below the estimated MVP of 500 to 1,000 individuals, and the monitored population has declined from 127 individuals in 1993 to 47 individuals in 2014; in 2016 the monitored population had increased slightly to 56 individuals (Service 2016, Appendix B). Therefore, the Chisos Mountains population is considered to have low resiliency. The Maderas del Carmen population in Mexico may have held the estimated MVP as recently as 2003, but the current population status is unknown, and thus the population is considered to have limited resilience (Service 2016). With only two known populations, both with limited resiliency, the species has extremely low redundancy and representation. However, if there are additional extant populations in Mexico, we would expect the redundancy and representation of the species would be greater. Based on the best available information, therefore, the species’ overall risk of extinction is such that we find it is in danger of extinction throughout its range.
Determination of Status Throughout a Significant Portion of Its Range

Consistent with our interpretation that there are two independent bases for listing species as described above, after examining the species’ status throughout all of its range, we now examine whether it is necessary to determine whether it is an “endangered species” or “threatened species” throughout a significant portion of its range. We must give operational effect to both the “throughout all” of its range language and the SPR phrase in the definitions of “endangered species” and “threatened species.” The Act, however, does not specify the relationship between the two bases for listing. As discussed above, to give operational effect to the “throughout all” language and that it is referenced first in the definition, we first consider species’ status throughout the entire range.

In order to give operational effect to the SPR language, the Service should undertake an SPR analysis if the species is neither in danger of extinction nor likely to become so in the foreseeable future throughout all of its range, to determine if the species should nonetheless be listed because of its status in an SPR. However, we have already concluded that this species is in danger of extinction throughout all of its range. We reach this conclusion when the species is experiencing high-magnitude threats across its range or threats are so high in particular areas that they severely affect the species across its range. Therefore, the species is in danger of extinction throughout every portion of its range and an analysis of whether there is any SPR that may be in danger of extinction or likely to become so would not result in a different outcome. Thus, we conclude that to give operational effect to both the “throughout all” language and the SPR phrase, the Service should conduct an SPR analysis if (and only if) a species does not warrant listing according to the “throughout all” language.
Because we have determined that the Guadalupe fescue is in danger of extinction throughout all of its range, we do not need to undertake an SPR analysis to determine if there are any significant portions of the species’ range where the species is likely to become in danger of extinction in the foreseeable future or where it does not meet the definitions of either “endangered species” or “threatened species.”

Therefore, on the basis of the best available scientific and commercial information, we are adding Guadalupe fescue to the List of Endangered and Threatened Plants as an endangered species in accordance with sections 3(6) and 4(a)(1) of the Act. We find that a threatened species status is not appropriate for Guadalupe fescue because of the immediacy of threats facing the species with only two known populations, at least one of which is declining in abundance.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened species under the Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing, results in public awareness, as well as conservation by Federal, State, Tribal, and local agencies; private organizations; and individuals. The Act encourages cooperation with the States and other countries, and calls for recovery actions to be carried out for listed species. The protection required by Federal agencies and the prohibitions against certain activities are discussed, in part, below.

The primary purpose of the Act is the conservation of endangered and threatened species and the ecosystems upon which they depend. The ultimate goal of such conservation efforts is the recovery of these listed species, so that they no longer need the protective measures of the Act. Subsection 4(f) of the Act calls for the Service to develop and implement recovery plans for the conservation of endangered and threatened species. The recovery planning process involves
the identification of actions that are necessary to halt or reverse the species’ decline by addressing the threats to its survival and recovery. The goal of this process is to restore listed species to a point where they are secure, self-sustaining, and functioning components of their ecosystems.

Recovery planning includes the development of a recovery outline shortly after a species is listed and preparation of a draft and final recovery plan. The recovery outline guides the immediate implementation of urgent recovery actions and describes the process to be used to develop a recovery plan. Revisions of the plan may be done to address continuing or new threats to the species, as new substantive information becomes available. The recovery plan identifies site-specific management actions that set a trigger for review of the five factors that control whether a species remains endangered or may be downlisted to threatened or delisted, and methods for monitoring recovery progress. Recovery plans also establish a framework for agencies to coordinate their recovery efforts and provide estimates of the cost of implementing recovery tasks. Recovery teams (composed of species experts, Federal and State agencies, nongovernmental organizations, and stakeholders) are often established to develop recovery plans. When completed, the recovery outline, draft recovery plan, and the final recovery plan will be available on our website (http://www.fws.gov/endangered) or from our Austin Ecological Services Field Office (see FOR FURTHER INFORMATION CONTACT).

Implementation of recovery actions generally requires the participation of a broad range of partners, including other Federal agencies, States, Tribes, nongovernmental organizations, businesses, and private landowners. Examples of recovery actions include habitat restoration (e.g., restoration of native vegetation), research, captive propagation and reintroduction, and outreach and education. The recovery of many listed species cannot be accomplished solely on
Federal lands because their range may occur primarily or solely on non-Federal lands. To achieve recovery of these species requires cooperative conservation efforts on private, State, and Tribal lands.

Following publication of this final listing rule, funding for recovery actions will be available from a variety of sources, including Federal budgets, State programs, and cost-share grants for non-Federal landowners, the academic community, and nongovernmental organizations. In addition, pursuant to section 6 of the Act, the State of Texas will be eligible for Federal funds to implement management actions that promote the protection or recovery of the Guadalupe fescue. Information on our grant programs that are available to aid species recovery can be found at: http://www.fws.gov/grants.

Please let us know if you are interested in participating in recovery efforts for the Guadalupe fescue. Additionally, we invite you to submit any new information on this species whenever it becomes available and any information you may have for recovery planning purposes (see FOR FURTHER INFORMATION CONTACT).

Section 7(a) of the Act requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as an endangered or threatened species and with respect to its critical habitat, if any is designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. Section 7(a)(2) of the Act requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of any endangered or threatened species or destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into consultation with the Service.
Federal agency actions within the species’ habitat that may require consultation as described in the preceding paragraph include the land management activities by the National Park Service within Big Bend National Park.

With respect to endangered plants, prohibitions outlined at 50 CFR 17.61 make it illegal for any person subject to the jurisdiction of the United States to import or export, transport in interstate or foreign commerce in the course of a commercial activity, sell or offer for sale in interstate or foreign commerce, or to remove and reduce to possession any such plant species from areas under Federal jurisdiction. In addition, for endangered plants, the Act prohibits malicious damage or destruction of any such species on any area under Federal jurisdiction, and the removal, cutting, digging up, or damaging or destroying of any such species on any other area in knowing violation of any State law or regulation, or in the course of any violation of a State criminal trespass law. Exceptions to these prohibitions are outlined in 50 CFR 17.62.

We may issue permits to carry out otherwise prohibited activities involving endangered plants under certain circumstances. Regulations governing permits are codified at 50 CFR 17.62. With regard to endangered plants, the Service may issue a permit authorizing any activity otherwise prohibited by 50 CFR 17.61 for scientific purposes or for enhancing the propagation or survival of endangered plants.

It is our policy, as published in the Federal Register on July 1, 1994 (59 FR 34272), to identify to the maximum extent practicable at the time a species is listed, those activities that would or would not constitute a violation of section 9 of the Act. The intent of this policy is to increase public awareness of the effect of a final listing on proposed and ongoing activities within the range of a listed species. Based on the best available information, the following
actions are unlikely to result in a violation of section 9, if these activities are carried out in accordance with existing regulations and permit requirements; this list is not comprehensive:

(1) Normal agricultural and silvicultural practices conducted on privately owned lands, including herbicide and pesticide use, which are carried out in accordance with any existing regulations, permit and label requirements, and best management practices;

(2) Recreation and management at National Parks that is conducted in accordance with existing National Park Service regulations and policies; and

(3) Normal residential landscape activities.

Based on the best available information, the following activities may potentially result in a violation of section 9 of the Act; this list is not comprehensive:

(1) Unauthorized damage or collection of Guadalupe fescue from lands under Federal jurisdiction;

(2) Destruction or degradation of the species’ habitat on lands under Federal jurisdiction, including the intentional introduction of nonnative organisms that compete with, consume, or harm Guadalupe fescue;

Questions regarding whether specific activities would constitute a violation of section 9 of the Act should be directed to the Austin Ecological Services Field Office (see FOR FURTHER INFORMATION CONTACT).

Critical Habitat

Background

Critical habitat is defined in section 3 of the Act as:

(1) The specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the Act, on which are found those physical or biological features
(a) Essential to the conservation of the species, and

(b) Which may require special management considerations or protection; and

(2) Specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Our regulations at 50 CFR 424.02 define the geographical area occupied by the species as an area that may generally be delineated around species’ occurrences, as determined by the Secretary (i.e., range). Such areas may include those areas used throughout all or part of the species’ life cycle, even if not used on a regular basis (e.g., migratory corridors, seasonal habitats, and habitats used periodically, but not solely by vagrant individuals).

Conservation, as defined under section 3 of the Act, means to use and the use of all methods and procedures that are necessary to bring an endangered or threatened species to the point at which the measures provided pursuant to the Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation, and, in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regulated taking.

Critical habitat receives protection under section 7 of the Act through the requirement that Federal agencies ensure, in consultation with the Service, that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Such designation does not allow the government or public to access private lands. Such designation does not require implementation of restoration, recovery, or enhancement measures by non-Federal landowners. Where a
landowner requests Federal agency funding or authorization for an action that may affect a listed species or critical habitat, the consultation requirements of section 7(a)(2) of the Act would apply, but even in the event of a destruction or adverse modification finding, the obligation of the Federal action agency and the landowner is not to restore or recover the species, but to implement reasonable and prudent alternatives to avoid destruction or adverse modification of critical habitat.

Under the first prong of the Act’s definition of critical habitat, areas within the geographical area occupied by the species at the time it was listed are included in a critical habitat designation if they contain physical or biological features (1) which are essential to the conservation of the species and (2) which may require special management considerations or protection. For these areas, critical habitat designations identify, to the extent known using the best scientific and commercial data available, those physical or biological features that are essential to the conservation of the species (such as space, food, cover, and protected habitat). In identifying those physical or biological features within an area, we focus on the specific features that support the life-history needs of the species, including but not limited to, water characteristics, soil type, geological features, prey, vegetation, symbiotic species, or other features. A feature may be a single habitat characteristic, or a more complex combination of habitat characteristics. Features may include habitat characteristics that support ephemeral or dynamic habitat conditions. Features may also be expressed in terms relating to principles of conservation biology, such as patch size, distribution distances, and connectivity.

Under the second prong of the Act’s definition of critical habitat, we can designate critical habitat in areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. For
example, an area currently occupied by the species but that was not occupied at the time of listing may be essential to the conservation of the species and may be included in the critical habitat designation.

Section 4 of the Act requires that we designate critical habitat on the basis of the best scientific data available. Further, our Policy on Information Standards Under the Endangered Species Act (published in the Federal Register on July 1, 1994 (59 FR 34271)), the Information Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106-554; H.R. 5658)), and our associated Information Quality Guidelines, provide criteria, establish procedures, and provide guidance to ensure that our decisions are based on the best scientific data available. They require our biologists, to the extent consistent with the Act and with the use of the best scientific data available, to use primary and original sources of information as the basis for recommendations to designate critical habitat.

When we are determining which areas should be designated as critical habitat, our primary source of information is generally the information developed during the listing process for the species. Information sources may include the species status assessment; any generalized conservation strategy, criteria, or outline that may have been developed for the species; the recovery plan for the species; articles in peer-reviewed journals; conservation plans developed by States and counties; scientific status surveys and studies; biological assessments; other unpublished materials; or experts’ opinions or personal knowledge.

Habitat is dynamic, and species may move from one area to another over time. We recognize that critical habitat designated at a particular point in time may not include all of the habitat areas that we may later determine are necessary for the recovery of the species. For these reasons, a critical habitat designation does not signal that habitat outside the designated area is
unimportant or may not be needed for recovery of the species. Areas that are important to the conservation of the species, both inside and outside the critical habitat designation, will continue to be subject to: (1) Conservation actions implemented under section 7(a)(1) of the Act, (2) regulatory protections afforded by the requirement in section 7(a)(2) of the Act for Federal agencies to ensure their actions are not likely to jeopardize the continued existence of any endangered or threatened species, and (3) section 9 of the Act’s prohibitions on taking any individual of the species, including taking caused by actions that affect habitat. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. These protections and conservation tools would continue to contribute to recovery of this species. Similarly, critical habitat designations made on the basis of the best available information at the time of designation will not control the direction and substance of future recovery plans, habitat conservation plans (HCPs), or other species conservation planning efforts if new information available at the time of these planning efforts calls for a different outcome.

**Physical or Biological Features**

In accordance with section 3(5)(A)(i) of the Act and regulations at 50 CFR 424.12(b), in determining which areas within the geographical area occupied by a species at the time of listing to designate as critical habitat, we consider the physical or biological features that are essential to the conservation of the species and which may require special management considerations or protection. For example, physical features might include gravel of a particular size required for spawning, alkali soil for seed germination, protective cover for migration, or susceptibility to flooding or fire that maintains necessary early-successional habitat characteristics. Biological features might include prey species, forage grasses, specific kinds or ages of trees for roosting or
nesting, symbiotic fungi, or a particular level of nonnative species consistent with conservation needs of the listed species. The features may also be combinations of habitat characteristics and may encompass the relationship between characteristics or the necessary amount of a characteristic needed to support the life history of the species. In considering whether features are essential to the conservation of the species, the Service may consider an appropriate quality, quantity, and spatial and temporal arrangement of habitat characteristics in the context of the life-history needs, condition, and status of the species. These characteristics include but are not limited to space for individual and population growth and for normal behavior; food, water, air, light, minerals, or other nutritional or physiological requirements; cover or shelter; sites for breeding, reproduction, or rearing (or development) of offspring; and habitats that are protected from disturbance.

We conducted a Species Status Assessment (SSA Report) for Guadalupe fescue, which is an evaluation of the best available scientific and commercial data on the status of the species. The SSA Report (Service 2016; available at: http://www.regulations.gov in Docket No. FWS–R2–ES–2016–0099 and FWS–R2–ES–2016–0100) is based on a thorough review of the natural history, habitats, ecology, populations, and range of Guadalupe fescue. The SSA Report provides the scientific information upon which this critical habitat determination is based (Service 2016).

*Space for Individual and Population Growth and for Normal Behavior*

The size of suitable habitat areas for Guadalupe fescue is likely to be important, although we do not know how large an area must be to support a viable population. However, we do know that many plant species in the Chihuahuan Desert have migrated to different elevations and latitudes, or were extirpated, since the end of the late Wisconsinan glaciation (about 11,000 years
Larger habitat areas provide more opportunities for populations to migrate, as plant communities and weather patterns change and, therefore, may be more suitable. Larger habitats are also expected to support larger populations and greater genetic diversity. We provisionally estimate that habitats of at least 494 ac (200 ha) are more likely to support long-term viability of Guadalupe fescue. Therefore, we determine that relatively large habitat areas that are at least 494 ac (200 ha) are important to provide the necessary space to support the physical or biological feature for this species.

Food, Water, Air, Light, Minerals, or Other Nutritional or Physiological Requirements

Precipitation is important to Guadalupe fescue, as flowering and survival rates are positively correlated with rainfall amount and timing. The amount of rainfall over longer periods, such as the previous 21 months, appears to have more influence on flowering, which occurs from August to October, than rainfall during the previous 9 months or the previous February through May (Service 2016, Appendix B). Population size may be positively correlated with rainfall over relatively long (33-month) periods. Rainfall (or drought) over shorter timeframes appears to have less effect on population size. Precipitation amounts and patterns are weather conditions that support the physical or biological features for Guadalupe fescue.

All historic and extant populations of Guadalupe fescue occur above about 1,800 meters (m) (5,905 feet (ft)) in the Chihuahuan Desert of northern Mexico and Texas, although we do not know the actual elevation tolerance of this species. Many plant species occur at relatively lower elevations in mountains where habitats are relatively cool and moist, such as in narrow ravines, north-facing slopes (in the northern hemisphere), or windward slopes where there is a pronounced rain shadow (higher rainfall on prevailing windward slopes). Larger habitat areas
provide more opportunities for populations to migrate, as plant communities and weather patterns change and, therefore, may be more suitable. Nevertheless, the 1,800-m elevation contour represents the best available information regarding the elevation tolerance of this species.

Habitat areas do not need to be contiguous to be considered occupied, provided that they are not separated by wide, low-elevation gaps. This rationale is based on expected long-distance dispersal of viable seeds of Guadalupe fescue by Carmen white-tailed deer (*Odocoileus virginianus carminis*), the most common ungulate in the Chisos Mountains. The diet of Carmen white-tailed deer consists of up to 12 percent grasses. Carmen white-tailed deer use habitats with dense stands of oak and the presence of free-standing water, and the range is restricted to elevations above 906 to 1,220 m (2,970 to 4,000 ft). The estimated home range is a radius of 1.1 to 2.4 kilometers (km) (0.7 to 1.5 miles (mi)). Hence, we expect that Carmen white-tailed deer are able to disperse viable seeds of Guadalupe fescue to potential habitats that are not separated by gaps that are below about 1,000 m (3,208 ft) and more than 2.4 km (1.5 mi) wide.

All known populations of Guadalupe fescue occur in rocky or talus soils of partially shaded sites in the understory of conifer-oak woodlands within the Chihuahuan Desert. The associated vegetation consists of relatively open stands of both conifer and oak trees in varying proportions. Conifer-oak woodlands may occur in areas classified as pine, conifer, pine-oak, or conifer-oak, and as forest or woodland, on available vegetation classification maps. The conifer species typically include one or more of the following: Mexican pinyon (*Pinus cembroides*), Arizona pine (*P. arizonica*), southwestern white pine (*P. strobiformis*), alligator juniper (*Juniperus deppeana*), drooping juniper (*J. flaccida*), and Arizona cypress (*Cupressus arizonica*). Characteristic oaks include one or more of the following: Chisos red oak (*Quercus*
gravesii), gray oak (Q. grisea), Lacey oak (Q. laceyi), and silverleaf oak (Q. hypoleucoides).

Other broadleaf trees, such as bigtooth maple (Acer grandidentatum), may also occur in this element. Therefore, we consider areas of rocky or talus soils of partially shaded sites in the understory of conifer-oak woodlands above elevations of 1,800 m (5,905 ft) within the Chihuahuan Desert to be a physical or biological feature of Guadalupe fescue.

Habitats That are Protected from Disturbance or are Representative of the Historic Geographical and Ecological Distributions of a Species

The role of fire is very likely important to maintain Guadalupe fescue habitat for two reasons. First, many grass and forb understory species are stimulated during the years immediately following wildfire, but decline during long periods without fire. Second, relatively frequent forest wildfires tend to be relatively cool because large amounts of dry fuel, such as dead trees, fallen branches, and leaf litter, have not accumulated; such fires do not kill large numbers of trees or radically change the vegetation structure and composition. Conversely, wildfires that burn where fuels and small dead trees have accumulated for many years can be very hot, catastrophic events that not only kill entire stands of trees, but also kill the seeds and beneficial microorganisms in the soil, such as mycorrhizal fungi. Fire is probably inevitable in the conifer and conifer-oak forests of the Chihuahuan Desert. Thus, more frequent, relatively cool fires may be essential for the long-term sustainability of these forested ecosystems and of Guadalupe fescue populations.

Summary of Essential Physical or Biological Features

We derive the specific physical or biological features essential for Guadalupe fescue from studies of this species’ habitat, ecology, and life history, as described above. Additional information can be found in the final listing rule, published elsewhere in this issue of the Federal
Register, and in the SSA Report (Service 2016). We have determined that the following physical or biological features are essential to the conservation of Guadalupe fescue:

(1) Areas within the Chihuahuan Desert:

(a) Above elevations of 1,800 m (5,905 ft), and

(b) That contain rocky or talus soils.

(2) Associated vegetation characterized by relatively open stands of both conifer and oak trees in varying proportions. This vegetation may occur in areas classified as pine, conifer, pine-oak, or conifer-oak, and as forest or woodland, on available vegetation classification maps.

Special Management Considerations or Protection

When designating critical habitat, we assess whether the specific areas within the geographical area occupied by the species at the time of listing contain features that are essential to the conservation of the species and which may require special management considerations or protection. The features essential to the conservation of this species may require special management considerations or protection to reduce the following threats: Changes in wildfire frequency; livestock grazing; erosion and trampling by visitors hiking off the trails; and invasive species.

Management activities that could ameliorate these threats and protect the integrity of the conifer-oak habitat include, but are not limited to: (1) Conducting prescribed burns under conditions that favor relatively cool burn temperatures; (2) removing livestock, including stray and feral livestock, from Guadalupe fescue habitats; (3) appropriately maintaining trails to reduce the incidence of trampling and erosion, and informing visitors of the need to remain on trails; and (4)
controlling and removing introduced invasive plants, such as horehound (*Marrubium vulgare*) and King Ranch bluestem (*Bothriochloa ischaemum*).

**Criteria Used To Identify Critical Habitat**

As required by section 4(b)(2) of the Act, we use the best scientific and commercial data available to designate critical habitat. In accordance with the Act and our implementing regulations at 50 CFR 424.12(b), we review available information pertaining to the habitat requirements of the species and identify specific areas within the geographical area occupied by the species at the time of listing and any specific areas outside the geographical area occupied by the species to be considered for designation as critical habitat. We are designating critical habitat in areas within the United States that are occupied by Guadalupe fescue at the time of listing. Occupied habitat for Guadalupe fescue is defined as areas with positive survey records since 2009 (when the Maderas del Carmen population in Mexico was last documented), and habitat areas around sites with positive survey records that contain conifer-oak woodlands and that are not separated by gaps of lower elevation (<1,000 m) terrain and are within the maximum distance that seed dispersal is expected to occur (about 2.4 km (1.5 mi)).

Sources of data on Guadalupe fescue occurrences include: The Texas Natural Diversity Database; herbarium records from the University of Texas, Missouri Botanical Garden, and University of Arizona; a survey report by Valdés-Reyna (2009); a status survey (Poole 1989); and monitoring data from Big Bend National Park (Sirotnak 2014). We obtained information on ecology and habitat requirements from the candidate conservation agreement (Big Bend National Park and Service 2008), scientific reports (Camp et al. 2006; Moir and Meents 1981; Zimmerman and Moir 1998), and Rare Plants of Texas (Poole et al. 2007). Big Bend National Park (2015) provided a recently revised vegetation classification map of the Park. We used
Areas Occupied at the Time of Listing

The critical habitat designation includes the only known extant population of Guadalupe fescue in the United States, within the Chisos Mountains of Big Bend National Park, which has retained the physical or biological features that will allow for the maintenance and expansion of the existing population (criteria described above). Guadalupe fescue historically occupied one additional site in the United States in McKittrick Canyon within Guadalupe Mountains National Park. However, we are not designating critical habitat there because the species has not been observed since 1952, and it is unlikely that the area is occupied at the time of listing (Armstrong 2016; Poole 2016; Sirotnak 2016). The best available information indicates that Guadalupe fescue is extirpated from McKittrick Canyon, and the habitat would no longer support the species due to the abundance of invasive grasses such as King Ranch bluestem, and, therefore, we do not consider the area within McKittrick Canyon to be essential for the conservation of the species.

We are designating a single unit of critical habitat consisting of five subunits totaling 7,815 acres (ac) (3,163 hectares (ha)). Although currently Guadalupe fescue plants have only been found in Subunit 1, we consider all subunits to be occupied because they are not separated by gaps of lower elevation (<1,000 m) terrain greater than 2.4 km (1.5 mi) wide. The entire unit lies within the Chisos Mountains of Big Bend National Park (see map in the Regulation Promulgation section, below). See Table 1, below, for summaries of land ownership and areas. No units or portions of units are being considered for exclusion or exemption.
When determining critical habitat boundaries, we made every effort to avoid including developed areas such as lands covered by buildings, pavement, and other structures because such lands lack physical or biological features necessary for Guadalupe fescue. The scale of the maps we prepared under the parameters for publication within the Code of Federal Regulations may not reflect the exclusion of such developed lands. Any such lands inadvertently left inside critical habitat boundaries shown on the maps of this final rule have been excluded by text in the final rule and are not designated as critical habitat. Therefore, a Federal action involving these lands would not trigger section 7 consultations with respect to critical habitat and the requirement of no adverse modification unless the specific action would affect the physical or biological features in the adjacent critical habitat.

We are designating critical habitat on lands that we have determined are occupied at the time of listing and contain sufficient elements of physical or biological features to support life-history processes essential to the conservation of the Guadalupe fescue. We are designating one critical habitat unit within the Chisos Mountains that contains all of the identified physical or biological features to support the life-history processes of Guadalupe fescue.

This final critical habitat designation is defined by the map, as modified by any accompanying regulatory text, presented at the end of this document in the Regulation Promulgation section. We include more detailed information on the boundaries of the critical habitat designation in the preamble of this document. We will make the coordinates or plot points or both on which the map is based available to the public on http://www.regulations.gov at Docket No. FWS–R2–ES–2016–0099 and FWS–R2–ES–2016–0100, on our Internet site (https://www.fws.gov/southwest/es/AustinTexas/ESA_Our_species.html), and at the field office responsible for the designation (see FOR FURTHER INFORMATION CONTACT, above).
Critical Habitat Designation

We are designating approximately 7,815 ac (3,163 ha) in one unit containing five subunits as critical habitat for Guadalupe fescue. The critical habitat area we describe below constitutes our current best assessment of areas that meet the definition of critical habitat for Guadalupe fescue. The area we are designating as critical habitat is shown in Table 1.

<table>
<thead>
<tr>
<th>Subunit</th>
<th>Occupied at Time of Listing?</th>
<th>Currently Occupied?</th>
<th>Ownership</th>
<th>Size (ha)</th>
<th>Size (ac)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Yes</td>
<td>Yes</td>
<td>National Park Service</td>
<td>2,648</td>
<td>6,542</td>
</tr>
<tr>
<td>2</td>
<td>Yes</td>
<td>Yes</td>
<td>National Park Service</td>
<td>391</td>
<td>966</td>
</tr>
<tr>
<td>3</td>
<td>Yes</td>
<td>Yes</td>
<td>National Park Service</td>
<td>100</td>
<td>248</td>
</tr>
<tr>
<td>4</td>
<td>Yes</td>
<td>Yes</td>
<td>National Park Service</td>
<td>13</td>
<td>32</td>
</tr>
<tr>
<td>5</td>
<td>Yes</td>
<td>Yes</td>
<td>National Park Service</td>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
<td>3,163</td>
<td>7,815</td>
</tr>
</tbody>
</table>

Below, we present a brief description of the Chisos Mountains Unit and reasons why it and the subunits contained within meet the definition of critical habitat for Guadalupe fescue.

Unit 1: Chisos Mountains

Unit 1 consists of 7,815 ac (3,163 ha) in the Chisos Mountains of Big Bend National Park. This unit is within the geographical area occupied by the species at the time of listing and...
contains all of the physical or biological features essential to the conservation of Guadalupe fescue. The habitat within Unit 1 consists of elevations of 1,800 m (5,905 ft) or greater, and the associated vegetation is classified as pine, pine-oak, juniper-oak, or conifer-oak. The geographic delineation of the unit resulted in five subunits that are separated from each other by narrow gaps of lower elevation terrain, but are otherwise similar with respect to vegetation, geological substrate, and soils. The physical or biological features in this unit may require special management considerations or protection to address threats from changes in wildfire frequency, livestock grazing, erosion and trampling by visitors hiking off the trail, and invasive species.

**Effects of Critical Habitat Designation**

*Section 7 Consultation*

Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that any action they fund, authorize, or carry out is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of designated critical habitat of such species.

On February 11, 2016, we published a final rule (81 FR 7214) that sets forth a new definition of destruction or adverse modification. Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the value of critical habitat for the conservation of a listed species. Such alterations may include, but are not limited to, those that alter the physical or biological features essential to the conservation of a species or that preclude or significantly delay development of such features.

If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency (action agency) must enter into consultation with us. Examples of actions that are subject to the section 7 consultation process are actions on State, tribal, local, or private lands
that require a Federal permit (such as a permit from the U.S. Army Corps of Engineers under section 404 of the Clean Water Act (33 U.S.C. 1251 et seq.) or a permit from the Service under section 10 of the Act) or that involve some other Federal action (such as funding from the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency). Federal actions not affecting listed species or critical habitat, and actions on State, tribal, local, or private lands that are not federally funded or authorized, do not require section 7 consultation.

As a result of section 7 consultation, we document compliance with the requirements of section 7(a)(2) through our issuance of:

(1) A concurrence letter for Federal actions that may affect, but are not likely to adversely affect, listed species or critical habitat; or

(2) A biological opinion for Federal actions that may affect and are likely to adversely affect, listed species or critical habitat.

When we issue a biological opinion concluding that a project is likely to jeopardize the continued existence of a listed species and/or destroy or adversely modify critical habitat, we provide reasonable and prudent alternatives to the project, if any are identifiable, that would avoid the likelihood of jeopardy and/or destruction or adverse modification of critical habitat. We define “reasonable and prudent alternatives” (at 50 CFR 402.02) as alternative actions identified during consultation that:

(1) Can be implemented in a manner consistent with the intended purpose of the action;

(2) Can be implemented consistent with the scope of the Federal agency’s legal authority and jurisdiction;

(3) Are economically and technologically feasible; and
(4) Would, in the Director’s opinion, avoid the likelihood of jeopardizing the continued existence of the listed species and/or avoid the likelihood of destroying or adversely modifying critical habitat.

Reasonable and prudent alternatives can vary from slight project modifications to extensive redesign or relocation of the project. Costs associated with implementing a reasonable and prudent alternative are similarly variable.

Regulations at 50 CFR 402.16 require Federal agencies to reinitiate consultation on previously reviewed actions in instances where we have listed a new species or subsequently designated critical habitat that may be affected and the Federal agency has retained discretionary involvement or control over the action (or the agency’s discretionary involvement or control is authorized by law). Consequently, Federal agencies sometimes may need to request reinitiation of consultation with us on actions for which formal consultation has been completed, if those actions with discretionary involvement or control may affect subsequently listed species or designated critical habitat.

Application of the “Adverse Modification” Standard

The key factor related to the adverse modification determination is whether, with implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended conservation role for the species. Activities that may destroy or adversely modify critical habitat are those that result in a direct or indirect alteration that appreciably diminishes the value of critical habitat for the conservation of Guadalupe fescue. Such alterations may include, but are not limited to, those that alter the physical or biological features essential to the conservation of this species or that preclude or significantly delay development of such features. As discussed above, the role of critical habitat is to support physical or biological
features essential to the conservation of a listed species and provide for the conservation of the species.

Section 4(b)(8) of the Act requires us to briefly evaluate and describe, in any proposed or final regulation that designates critical habitat, activities involving a Federal action that may destroy or adversely modify such habitat, or that may be affected by such designation.

Activities that may affect critical habitat, when carried out, funded, or authorized by a Federal agency, should result in consultation for Guadalupe fescue. These activities include, but are not limited to:

(1) Actions that would remove or significantly alter the conifer-oak woodland vegetation. Such actions could include, but are not limited to, cutting or killing trees and shrubs to an extent that a site is no longer suitable to Guadalupe fescue, due to increased levels of sunlight, exposure to wind, or other factors. Fire suppression has changed the natural wildfire cycle and may have altered the conifer-oak woodland habitat to an extent that it is no longer optimal for Guadalupe fescue due to increased tree and shrub densities. Hence, pruning or thinning of woody vegetation may benefit Guadalupe fescue if the tree canopy is too dense; therefore, prescribed pruning or thinning would not be considered adverse modification. The introduction of invasive plants could also adversely affect Guadalupe fescue through increased competition for light, water, and nutrients, or through an allelopathic effect (the suppression of growth of one plant species by another due to the release of toxic substances).

(2) Actions that disturb the soil, or lead to increased soil erosion. Such actions could include, but are not limited to, excavation of the soil; removal of vegetation and litter; or construction of roads, trails, or structures that channel runoff and form gullies. The loss or disturbance of soil could deplete the soil seed bank of Guadalupe fescue or alter soil depth and
composition to a degree that is no longer suitable for Guadalupe fescue. However, some actions that affect soil or litter may be prescribed to improve habitat conditions for Guadalupe fescue, such as prescribed burning, and would, therefore, not be considered adverse modifications.

**Exemptions**

*Application of Section 4(a)(3) of the Act*

Section 4(a)(3)(B)(i) of the Act (16 U.S.C. 1533(a)(3)(B)(i)) provides that: “The Secretary shall not designate as critical habitat any lands or other geographical areas owned or controlled by the Department of Defense, or designated for its use, that are subject to an integrated natural resources management plan [INRMP] prepared under section 101 of the Sikes Act (16 U.S.C. 670a), if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation.” There are no Department of Defense lands with a completed INRMP within the critical habitat designation.

*Consideration of Impacts Under Section 4(b)(2) of the Act*

Section 4(b)(2) of the Act states that the Secretary shall designate and make revisions to critical habitat on the basis of the best available scientific data after taking into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat. The Secretary may exclude an area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific data available, that the failure to designate such area as critical habitat will result in the extinction of the species. In making that determination, the statute on its face, as well as the legislative history, are clear that the Secretary has broad discretion regarding which factor(s) to use and how much weight to give to any factor.
When considering the benefits of exclusion, we consider, among other things, whether exclusion of a specific area is likely to result in conservation; the continuation, strengthening, or encouragement of partnerships; or implementation of a management plan. In the case of Guadalupe fescue, the benefits of critical habitat include public awareness of the presence of Guadalupe fescue and the importance of habitat protection, and, where a Federal nexus exists, increased habitat protection for Guadalupe fescue due to protection from adverse modification or destruction of critical habitat. In practice, situations with a Federal nexus exist primarily on Federal lands or for projects undertaken by Federal agencies. Because Guadalupe fescue critical habitat is located exclusively on National Park Service lands, a Federal nexus exists for any action.

Consideration of Economic Impacts

Section 4(b)(2) of the Act and its implementing regulations require that we consider the economic impact that may result from a designation of critical habitat. In order to consider economic impacts, we prepared an incremental effects memorandum (IEM) and screening analysis which together with our narrative and interpretation of effects we consider our draft economic analysis (DEA) of the proposed critical habitat designation and related factors (IeC, 2016 entire). The analysis, dated April 27, 2016, was made available for public review from September 9, 2016, through November 8, 2016 (IeC, 2016 entire). The DEA addressed probable economic impacts of critical habitat designation for Guadalupe fescue. Following the close of the comment period, we reviewed and evaluated all information submitted during the comment period that may pertain to our consideration of the probable incremental economic impacts of this critical habitat designation. Additional information relevant to the probable incremental

Executive Orders (E.O.s) 12866 and 13563 direct Federal agencies to assess the costs and benefits of available regulatory alternatives in quantitative (to the extent feasible) and qualitative terms. Consistent with the E.O.s’ regulatory analysis requirements, our effects analysis under the Act may take into consideration impacts to both directly and indirectly affected entities, where practicable and reasonable. If sufficient data are available, we assess, to the extent practicable, the probable impacts to both directly and indirectly affected entities. As part of our screening analysis, we considered the types of economic activities that are likely to occur within the areas likely to be affected by the critical habitat designation. In our evaluation of the probable incremental economic impacts that may result from the proposed designation of critical habitat for Guadalupe fescue, first we identified, in the IEM dated February 23, 2016, probable incremental economic impacts associated with the following category of activities: Federal lands management (National Park Service, Big Bend National Park).

We considered each industry or category individually. Additionally, we considered whether their activities have any Federal involvement. Critical habitat designation generally will not affect activities that do not have any Federal involvement; under the Act, designation of critical habitat only affects activities conducted, funded, permitted, or authorized by Federal agencies. In areas where Guadalupe fescue is present, the National Park Service will be required to consult with the Service under section 7 of the Act on activities they fund, permit, or implement that may affect the species. Additionally, consultations to avoid the destruction or
adverse modification of critical habitat would be incorporated into the existing consultation process. Therefore, disproportionate impacts to any geographic area or sector are not likely as a result of this critical habitat designation.

The critical habitat designation for Guadalupe fescue consists of a single unit of critical habitat consisting of five subunits currently occupied by the species. We are not designating any units of unoccupied habitat. The Chisos Mountains critical habitat unit totals 7,815 ac (3,163 ha) and is entirely contained within federally owned land at Big Bend National Park. We have not identified any ongoing or future actions that would warrant additional recommendations or project modifications to avoid adversely modifying critical habitat above those we would recommend for avoiding jeopardy.

Regarding projects that would occur in occupied habitat outside known population locations, we will recommend that Big Bend National Park first conduct surveys for Guadalupe fescue within the project impact area. If the species is found, we would recommend the same modifications previously described for avoiding jeopardy to the species. If the species is not found, we will recommend only that Big Bend National Park follow its established land management procedures.

We anticipate minimal change in behavior at Big Bend National Park if we designate critical habitat for Guadalupe fescue. The only change we foresee is conducting surveys in areas of critical habitat based on our recommendation for surveys. Based on Big Bend National Park’s history of consultation under section 7 of the Act and on the consultation history of the most comparable species, Zapata bladderpod (Lesquerella thamnophila), we anticipate that this critical habitat designation may result in a maximum of two additional consultations per decade.
Exclusions

Exclusions Based on Economic Impacts

The Service considered the economic impacts of the critical habitat designation, and the Secretary is not exercising his discretion to exclude any areas from this designation of critical habitat for the Guadalupe fescue based on economic impacts.

A copy of the IEM and screening analysis with supporting documents may be obtained by contacting the Austin Ecological Services Field Office (see ADDRESSES) or by downloading from the Internet at http://www.regulations.gov in Docket No. FWS–R2–ES–2016–0099 and FWS–R2–ES–2016–0100.

Exclusions Based on National Security Impacts

Under section 4(b)(2) of the Act, we consider whether there are lands where a national security impact might exist. In preparing this final rule, we have determined that the lands within the final designation of critical habitat for Guadalupe fescue are not owned or managed by the Department of Defense or Department of Homeland Security. In addition, the locations of the critical habitat areas are at high elevations in remote areas of Big Bend National Park and not close enough to the international border with Mexico to raise any border maintenance concerns. The closest critical habitat is approximately 20.1 km (12.5 mi) away from Mexican border. Therefore, we anticipate no impact on national security. Consequently, the Secretary is not intending to exercise his discretion to exclude any areas from the final designation based on impacts on national security.

Exclusions Based on Other Relevant Impacts

Under section 4(b)(2) of the Act, we consider any other relevant impacts, in addition to economic impacts and impacts on national security. We consider a number of factors, including
whether the landowners have developed any HCPs or other management plans for the area, or whether there are conservation partnerships that would be encouraged by designation of, or exclusion from, critical habitat. In addition, we look at any tribal issues, and consider the government-to-government relationship of the United States with tribal entities. We also consider any social impacts that might occur because of the designation.

In preparing this final rule, we have determined that there are currently no HCPs or other management plans for Guadalupe fescue, and the final designation does not include any tribal lands or trust resources. We anticipate no impact on tribal lands, partnerships, or HCPs from this critical habitat designation. Accordingly, the Secretary does not intend to exercise his discretion to exclude any areas from the final designation based on other relevant impacts.

**Required Determinations**

*Regulatory Planning and Review (Executive Orders 12866 and 13563)*

Executive Order 12866 provides that the Office of Information and Regulatory Affairs (OIRA) will review all significant rules. The Office of Information and Regulatory Affairs has determined that this rule is not significant.

Executive Order 13563 reaffirms the principles of E.O. 12866 while calling for improvements in the nation's regulatory system to promote predictability, to reduce uncertainty, and to use the best, most innovative, and least burdensome tools for achieving regulatory ends. The executive order directs agencies to consider regulatory approaches that reduce burdens and maintain flexibility and freedom of choice for the public where these approaches are relevant, feasible, and consistent with regulatory objectives. E.O. 13563 emphasizes further that regulations must be based on the best available science and that the rulemaking process must
allow for public participation and an open exchange of ideas. We have developed this rule in a manner consistent with these requirements.

*Regulatory Flexibility Act (5 U.S.C. 601 et seq.)*

Under the Regulatory Flexibility Act (RFA; 5 U.S.C. 601 et seq.), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA; 5 U.S.C. 801 et seq.), whenever an agency is required to publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effects of the rule on small entities (i.e., small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of the agency certifies the rule will not have a significant economic impact on a substantial number of small entities. The SBREFA amended the RFA to require Federal agencies to provide a certification statement of the factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities.

According to the Small Business Administration, small entities include small organizations such as independent nonprofit organizations; small governmental jurisdictions, including school boards and city and town governments that serve fewer than 50,000 residents; and small businesses (13 CFR 121.201). Small businesses include manufacturing and mining concerns with fewer than 500 employees, wholesale trade entities with fewer than 100 employees, retail and service businesses with less than $5 million in annual sales, general and heavy construction businesses with less than $27.5 million in annual business, special trade contractors doing less than $11.5 million in annual business, and agricultural businesses with annual sales less than $750,000. To determine if potential economic impacts to these small entities are significant, we considered the types of activities that might trigger regulatory impacts.
under this designation as well as types of project modifications that may result. In general, the term “significant economic impact” is meant to apply to a typical small business firm’s business operations.

The Service’s current understanding of the requirements under the RFA, as amended, and following recent court decisions, is that Federal agencies are only required to evaluate the potential incremental impacts of rulemaking on those entities directly regulated by the rulemaking itself, and, therefore, are not required to evaluate the potential impacts to indirectly regulated entities. The regulatory mechanism through which critical habitat protections are realized is section 7 of the Act, which requires Federal agencies, in consultation with the Service, to ensure that any action authorized, funded, or carried out by the Agency is not likely to adversely modify critical habitat. Therefore, under section 7, only Federal action agencies are directly subject to the specific regulatory requirement (avoiding destruction and adverse modification) imposed by critical habitat designation. Consequently, it is our position that only Federal action agencies will be directly regulated by this designation. Moreover, Federal agencies are not small entities. Therefore, because no small entities are directly regulated by this rulemaking, the Service certifies that this final critical habitat designation will not have a significant economic impact on a substantial number of small entities.

In summary, we have considered whether the final designation would result in a significant economic impact on a substantial number of small entities. For the above reasons and based on currently available information, we certify that the final critical habitat designation would not have a significant economic impact on a substantial number of small business entities. Therefore, a regulatory flexibility analysis is not required.
Energy Supply, Distribution, or Use—Executive Order 13211

Executive Order 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use) requires agencies to prepare Statements of Energy Effects when undertaking certain actions. In our economic analysis, we did not find that the designation of this final critical habitat will significantly affect energy supplies, distribution, or use, because the critical habitat unit is entirely contained within Big Bend National Park. Therefore, this action is not a significant energy action, and no Statement of Energy Effects is required.

Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.)

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.), we make the following findings:

(1) This rule would not produce a Federal mandate. In general, a Federal mandate is a provision in legislation, statute, or regulation that would impose an enforceable duty upon State, local, or tribal governments, or the private sector, and includes both “Federal intergovernmental mandates” and “Federal private sector mandates.” These terms are defined in 2 U.S.C. 658(5)–(7). “Federal intergovernmental mandate” includes a regulation that “would impose an enforceable duty upon State, local, or tribal governments” with two exceptions. It excludes “a condition of Federal assistance.” It also excludes “a duty arising from participation in a voluntary Federal program,” unless the regulation “relates to a then-existing Federal program under which $500,000,000 or more is provided annually to State, local, and tribal governments under entitlement authority,” if the provision would “increase the stringency of conditions of assistance” or “place caps upon, or otherwise decrease, the Federal Government’s responsibility to provide funding,” and the State, local, or tribal governments “lack authority” to adjust accordingly. At the time of enactment, these entitlement programs were: Medicaid; Aid to
Families with Dependent Children work programs; Child Nutrition; Food Stamps; Social Services Block Grants; Vocational Rehabilitation State Grants; Foster Care, Adoption Assistance, and Independent Living; Family Support Welfare Services; and Child Support Enforcement. “Federal private sector mandate” includes a regulation that “would impose an enforceable duty upon the private sector, except (i) a condition of Federal assistance or (ii) a duty arising from participation in a voluntary Federal program.”

The designation of critical habitat does not impose a legally binding duty on non-Federal Government entities or private parties. Under the Act, the only regulatory effect is that Federal agencies must ensure that their actions do not destroy or adversely modify critical habitat under section 7. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are indirectly impacted because they receive Federal assistance or participate in a voluntary Federal aid program, the Unfunded Mandates Reform Act would not apply, nor would critical habitat shift the costs of the large entitlement programs listed above onto State governments.

(2) We do not believe that this rule would significantly or uniquely affect small governments because we are designating only a single critical habitat unit that is entirely owned by the National Park Service. Therefore, a Small Government Agency Plan is not required.

**Takings—Executive Order 12630**

In accordance with E.O. 12630 (“Government Actions and Interference with Constitutionally Protected Private Property Rights”), we have analyzed the potential takings
implications of designating critical habitat for Guadalupe fescue in a takings implications assessment. The Act does not authorize the Service to regulate private actions on private lands or confiscate private property as a result of critical habitat designation. Designation of critical habitat does not affect land ownership, or establish any closures or restrictions on use of or access to the designated areas. Furthermore, the designation of critical habitat does not affect landowner actions that do not require Federal funding or permits, nor does it preclude development of habitat conservation programs or issuance of incidental take permits to permit actions that do require Federal funding or permits to go forward. However, Federal agencies are prohibited from carrying out, funding, or authorizing actions that would destroy or adversely modify critical habitat. A takings implications assessment has been completed and concludes the designation of critical habitat for Guadalupe fescue would not pose significant takings implications for lands within or affected by the designation.

**Federalism—Executive Order 13132**

In accordance with E.O. 13132 (Federalism), this final rule does not have significant Federalism effects. A federalism summary impact statement is not required. In keeping with Department of the Interior and Department of Commerce policy, we requested information from, and coordinated development of this critical habitat designation with, appropriate State resource agencies in Texas. From a federalism perspective, the designation of critical habitat directly affects only the responsibilities of Federal agencies. The Act imposes no other duties with respect to critical habitat, either for States and local governments, or for anyone else. As a result, this final rule does not have substantial direct effects either on the States, or on the relationship between the national government and the States, or on the distribution of powers and responsibilities among the various levels of government. The designation may have some
benefit to these governments because the areas that contain the features essential to the conservation of the species are more clearly defined, and the physical and biological features of the habitat necessary to the conservation of the species are specifically identified. This information does not alter where and what federally sponsored activities may occur. However, it may assist these local governments in long-range planning (because these local governments no longer have to wait for case-by-case section 7 consultations to occur).

Where State and local governments require approval or authorization from a Federal agency for actions that may affect critical habitat, consultation under section 7(a)(2) of the Act would be required. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency.

Civil Justice Reform—Executive Order 12988

In accordance with Executive Order 12988 (Civil Justice Reform), the Office of the Solicitor has determined that the rule does not unduly burden the judicial system and that it meets the requirements of sections 3(a) and 3(b)(2) of the Order. We are designating critical habitat in accordance with the provisions of the Act. To assist the public in understanding the habitat needs of the species, the rule identifies the elements of physical or biological features essential to the conservation of the species. The areas of critical habitat are presented on a map, and this document provides several options for the interested public to obtain more detailed location information, if desired.
Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)

This final rule does not contain any new collections of information that require approval by OMB under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). This rule will not impose recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

National Environmental Policy Act (42 U.S.C. 4321 et seq.)

It is our position that, outside the jurisdiction of the U.S. Court of Appeals for the Tenth Circuit, we do not need to prepare environmental analyses pursuant to the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 et seq.) in connection with designating critical habitat under the Act. We published a notice outlining our reasons for this determination in the Federal Register on October 25, 1983 (48 FR 49244). This position was upheld by the U.S. Court of Appeals for the Ninth Circuit (Douglas County v. Babbitt, 48 F.3d 1495 (9th Cir. 1995), cert. denied 516 U.S. 1042 (1996)). Because all of the final critical habitat lies outside the jurisdiction of the U.S. Court of Appeals for the Tenth Circuit, we will not prepare a NEPA analysis.

Government-to-Government Relationship with Tribes

In accordance with the President’s memorandum of April 29, 1994 (Government-to-Government Relations with Native American Tribal Governments; 59 FR 22951), Executive Order 13175 (Consultation and Coordination With Indian Tribal Governments), and the Department of the Interior’s manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a government-to-government
basis. In accordance with Secretarial Order 3206 of June 5, 1997 (American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act), we readily acknowledge our responsibilities to work directly with tribes in developing programs for healthy ecosystems, to acknowledge that tribal lands are not subject to the same controls as Federal public lands, to remain sensitive to Indian culture, and to make information available to tribes.

We determined that Guadalupe fescue does not occur on any tribal lands at the time of listing, and no tribal lands unoccupied by Guadalupe fescue are essential for the conservation of the species. Therefore, we are not designating critical habitat for Guadalupe fescue on tribal lands.

References Cited


Authors

The primary authors of this final rule are the staff members of the Austin Ecological Services Field Office.

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

Regulation Promulgation

Accordingly, we amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:
PART 17—ENDANGERED AND THREATENED WILDLIFE AND PLANTS

1. The authority citation for part 17 continues to read as follows:

   AUTHORITY: 16 U.S.C. 1361–1407; 1531–1544; and 4201–4245, unless otherwise noted.

2. Amend § 17.12(h) by adding an entry for “Festuca ligulata” to the List of Endangered and Threatened Plants in alphabetical order under FLOWERING PLANTS to read as follows:

   § 17.12 Endangered and threatened plants.

   * * * * * * *

   (h) * * *

<table>
<thead>
<tr>
<th>Scientific name</th>
<th>Common name</th>
<th>Where listed</th>
<th>Status</th>
<th>Listing citations and applicable rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLOWERING PLANTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* * * * * *</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Festuca ligulata</td>
<td>Guadalupe fescue</td>
<td>Wherever found</td>
<td>E</td>
<td>82 FR [Insert Federal Register page where the document begins], [Insert date of publication in the Federal Register]</td>
</tr>
<tr>
<td>* * * * * *</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Amend § 17.96 by adding an entry for “Festuca ligulata (Guadalupe fescue)” in alphabetical order under Family Poaceae to read as follows:

   § 17.96 Critical habitat—plants.

   (a) * * *

   Family Poaceae: Festuca ligulata (Guadalupe fescue)

   (1) A critical habitat unit, including five subunits, is depicted for Brewster County, Texas, on the map below.
(2) Within these areas, the physical or biological features essential to the conservation of Guadalupe fescue consist of:

(i) Areas within the Chihuahuan Desert:
   
   (A) Above elevations of 1,800 m (5,905 ft), and
   
   (B) That contain rocky or talus soils.

(ii) Associated vegetation characterized by relatively open stands of both conifer and oak trees in varying proportions. This vegetation may occur in areas classified as pine, conifer, pine-oak, or conifer-oak, and as forest or woodland, on available vegetation classification maps.

(3) Critical habitat does not include manmade structures (such as buildings, aqueducts, runways, roads, and other paved areas) and the land on which they are located existing within the legal boundaries on [insert date 30 days after date of publication in the FEDERAL REGISTER].

(4) Critical habitat map units. We defined the critical habitat unit using the following Geographic Information System data layers: a Digital Elevation Model produced by the U.S. Geological Survey; and a Shapefile of vegetation classifications at Big Bend National Park, created and provided to us by Park personnel. The map in this entry, as modified by any accompanying regulatory text, establishes the boundaries of the critical habitat designation. The coordinates or plot points or both on which the map is based are available to the public at the Service’s Internet site (https://www.fws.gov/southwest/es/AustinTexas/ESA_Our_species.html), at http://www.regulations.gov at Docket No. FWS–R2–ES–2016–0099 and FWS–R2–ES–2016–0100, and at the field office responsible for this designation. You may obtain field office location information by contacting one of the Service regional offices, the addresses of which are listed at 50 CFR 2.2.

(5) Map of Unit 1, Big Bend National Park, Brewster County, Texas, follows:
Guadalupe Fescue Critical Habitat Unit and Subunits, Chisos Mountains, Big Bend National Park.

Symbols:
- Critical Habitat
- Park Road
- 2° Park Road
- 100-m Topographic Contour

Map showing Chisos Basin and Panther Junction.
Dated: August 29, 2017

Signed: James W. Kurth

* * * * *

Acting Director, U.S. Fish and Wildlife Service.

Billing Code 4333–15

[FR Doc. 2017-19001 Filed: 9/6/2017 8:45 am; Publication Date: 9/7/2017]